



HIV/AIDS in Pregnant Women and in Children

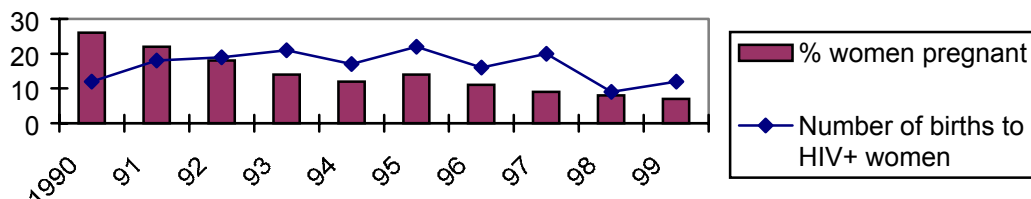
SUMMARY: Relatively few local children have been diagnosed with HIV or AIDS, and all recent infections have been among children born to an HIV-infected mother. In King County, 0.4% of all persons diagnosed with HIV infection were among children under age 13, compared with 1% to 2% of cases in some parts of the U.S. We estimate that 14 out of every 10,000 women of childbearing age in King County has HIV, with significantly higher rates among women of color and their children compared to Whites. The Centers for Disease Control and Prevention has reported a steep decline nationwide in perinatally-acquired HIV resulting from rapid implementation of zidovudine and other antiretroviral therapies to reduce HIV transmission from mother to child. These successes highlight the importance of educating health care providers and the public in general about the benefits of HIV counseling and testing of pregnant women and those who may become pregnant.

AIDS/HIV CASES AMONG CHILDREN IN KING COUNTY:

- Only 32 pediatric HIV infections (age 0 to 12 years at the time of HIV diagnosis) have ever been reported in King County. These represent 0.4% of the 8,628 persons ever diagnosed with HIV in King County.
- Twenty-eight of the 32 HIV cases in children were infected perinatally (before birth or during labor and delivery to an HIV infected mother). Three children were infected through blood products administered for hemophilia treatment; birth information was missing for one child.
- There have been no blood-product associated HIV infections diagnosed among children since 1986.
- Fifteen of the 32 pediatric cases developed AIDS, and eight have died.
- The most recent case of documented perinatal transmission was in 1997. None of the estimated ten to fifteen infants born to HIV-infected mothers annually since 1997 have become infected.
- Of the 24 children living, most (17) are now adolescents or young adults over age 13.
- The race/ethnicity of the 32 children with HIV/AIDS is 50% African American; 31% White; 13% Hispanic; and 6% Asian/Pacific Islander.

HIV POSITIVE PREGNANT WOMEN RECEIVING CARE IN KING COUNTY, 1990-1999:

- Pregnancy is common among HIV-infected women. In the ASD study sponsored by Public Health—Seattle & King County, 509 HIV positive women receiving care with King County providers were followed for an average of 3 years and 133 (26%) were pregnant at any time between 1990-99. *[Note: Some of these 509 women were residents of other counties and some are now deceased.]*
 - ✓ Among the HIV + women followed in this study, there were 9 to 21 births per year (see figure below).
 - ✓ The percent of HIV+ women who were pregnant declined from 26% in 1990 to 7% in 1999 (figure).
 - ✓ The average age of women with any pregnancy was 27 years relative to 34 years in those without pregnancies. Nearly one-fourth (24%) of women with any pregnancy had two or more pregnancies.



- ✓ There were no differences in the race of women who became pregnant vs. those who did not.
- ✓ Compared to women without pregnancy during follow-up, pregnant women were less likely to have a diagnosis of severe mental illness (psychoses & bipolar disorders—5% vs. 14%), but equally likely to be diagnosed with substance abuse (injection or non-injection drug use or alcohol abuse—42% vs. 43%).

HIV/AIDS AMONG WOMEN OF CHILDBEARING AGE (15-44 years) IN KING COUNTY:

- There are an estimated 750 HIV-infected adult or adolescent women in King County.
- Approximately 83% of HIV-infected women are 15 to 44 years old, resulting in an estimated 435 to 650 (midpoint = 545) HIV-infected women of childbearing age living in King County.
- Given that there are about 384,000 women age 15-44 years living in King County, this means about 14 out of every 10,000 women of childbearing age has HIV infection.
- Women comprise 7% (148/2104) of persons living with AIDS and 11% (134/1183) of persons living with HIV who were 15-44 years old at the time of their diagnosis. *[Note that HIV case reporting is incomplete at this time].*
- Women comprised 39% of the 57 cases age 13 to 19 at the time of their HIV or AIDS diagnosis.

INFANTS BORN TO HIV POSITIVE MOTHERS AND MATERNAL ANTIRETROVIRAL USE:

- Since 1987, 217 pregnancies among HIV infected women were clinically managed by experts at the University of WA Department of Obstetrics & Gynecology, Public Health—Seattle & King County's Northwest Family Center or Children's Hospital & Medical Center. Approximately half of these women were residents of King County. Among the 71 children born to these women between 1987 and 1993, eight (11%) became infected with HIV. Since 1994, when anti-retroviral therapy during pregnancy became standard, only one of 137 children (<1%) subsequently became HIV infected.
- Since 1994, there have been 9 additional HIV-infected children born to mothers who were not in care at one of the above facilities. Many of these mothers were unaware of their HIV status prior to pregnancy.
- Of 96 pregnant women followed by local experts since 1997, 70% were prescribed highly active antiretroviral therapy, 14% dual therapy, and 16% monotherapy. Only one woman did not receive antiretrovirals.

HIV PREVALENCE AND INCIDENCE:

- The Survey of Childbearing Women was a federally-funded, population-based survey that used blood obtained by metabolic screening programs to anonymously test newborns for HIV antibodies; a positive test indicated maternal HIV infection. The survey tested 123,268 infants born from 1989-95 and found maternal HIV infection in 0.04% (about 4 in 10,000) of King County women giving birth. Rates of HIV infection were 10 times higher in African American women compared to White women.
- Local data from 1997 to 1999 found 60 HIV-infected women out of 15,635 women tested at publicly-funded counseling and testing sites (less than 4/1000). Of these, 8 of 55 (15%) of those tested for recent infection by the LS-EIA method were found to have acquired HIV within the past 2 to 5 months.

NATIONAL STUDIES AND POLICY RECOMMENDATIONS:

- A 1994 landmark study known as Pediatric AIDS Clinical Trials Group (PACTG) 076 showed reduction of perinatal HIV transmission from 26% to 8% with maternal and neonatal zidovudine (AZT) use.
- It is now recommended that all pregnant women undergo voluntary HIV screening, and that all HIV positive pregnant women be prescribed an antiretroviral regimen which includes AZT, especially in the last weeks of pregnancy and during delivery, and that children born to these women receive at least AZT.
- Universal HIV screening of pregnant women would reduce provider bias, as providers often do not request HIV tests for women they do not perceive to be at risk; it could also reduce stigmatization around HIV testing that may be felt by pregnant women. The Institute of Medicine has recommended routine HIV testing by a written decline option.
- In PACTG 367, 945 HIV positive pregnant women observed in 1998-99 were accessed for antiretroviral use and pregnancy outcomes.
 - ✓ Of the 945 women, 13% received no antiretrovirals, 19% received AZT alone; and 68% received multidrug antiretroviral regimens with or without a protease inhibitor.
 - ✓ Transmission rates of HIV to the infants were 26% with no antiretroviral therapy, 8% on AZT alone, and 1% to 3% for the other antiretroviral regimens.
- The risk of perinatal transmission increases if a woman acquires HIV during pregnancy, has a high HIV viral load, refuses antiretrovirals, and/or breastfeeds.